

DICTIONARY FILE UPDATES: 28 MAR 2002 HIGHEST RN 403597-33-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the H/Z/CA/CAPLUS files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAPLUS files incorporating CAS Registry Numbers with the P indicator between 12/27/01 and 1/23/02, are encouraged to re-run these strategies. Contact the CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698, worldwide, or send an e-mail to help@cas.org for further assistance or to receive a credit for any duplicate searches.

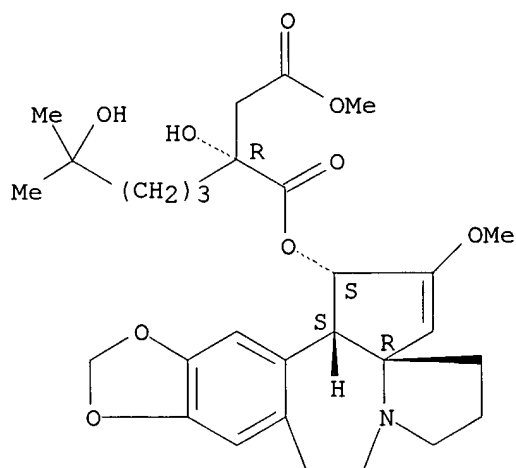
=> s homoharringtonine/cn
L1 1 HOMOARRINGTONINE/CN

=> d 11

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 26833-87-4 REGISTRY
CN Cephalotaxine, 4-methyl (2R)-2-hydroxy-2-(4-hydroxy-4-methylpentyl)butanedioate (ester) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 4H-Cyclopenta[a][1,3]dioxolo[4,5-h]pyrrolo[2,1-b][3]benzazepine, cephalotaxine deriv.
CN Cephalotaxine, 4-methyl 2-hydroxy-2-(4-hydroxy-4-methylpentyl)butanedioate (ester), [3(R)]-
CN **Homoharringtonine (8CI)**
OTHER NAMES:
CN NSC 141633
FS STEREOSEARCH
MF C29 H39 N O9
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, NAPRALERT, PHAR, RTECS*, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).

34/21110



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

225 REFERENCES IN FILE CA (1967 TO DATE)
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 226 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

6.34

6.55

FILE 'CAPLUS' ENTERED AT 07:03:16 ON 01 APR 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 1 Apr 2002 VOL 136 ISS 14

FILE LAST UPDATED: 28 Mar 2002 (20020328/ED)

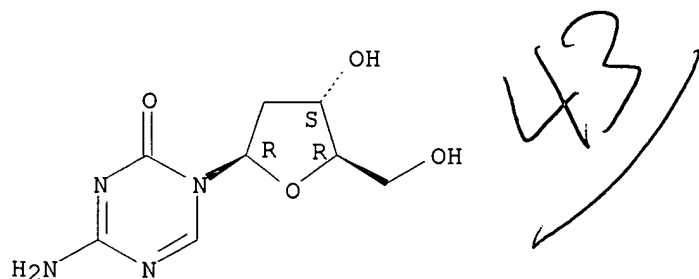
This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAPLUS files incorporating CAS Registry

(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

356 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
357 REFERENCES IN FILE CAPLUS (1967 TO DATE)
7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s troxacytidine/cn
L3 0 TROXACYTABINE/CN

=> s cytosine arabinoside/cn
L4 1 CYTOSINE ARABINOSIDE/CN

=> d 14

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 147-94-4 REGISTRY
CN 2(1H)-Pyrimidinone, 4-amino-1-.beta.-D-arabinofuranosyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cytosine, 1-.beta.-D-arabinofuranosyl- (6CI, 8CI)

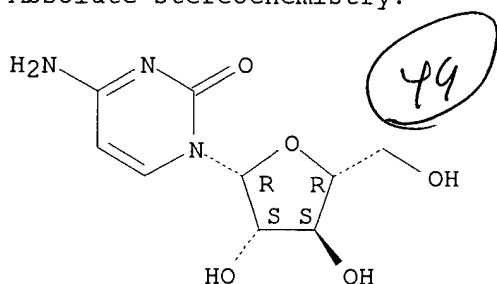
OTHER NAMES:

CN (Arabinofuranosyl)cytosine
CN 1-(.beta.-D-Arabinofuranosyl)cytosine
CN 1-(Arabinofuranosyl)cytosine
CN 1-.beta.-Arabinofuranosylcytosine
CN 1-.beta.-D-Arabinosylcytosine
CN 4-Amino-1-arabinofuranosyl-2-oxo-1,2-dihydropyrimidine
CN 58: PN: US6159940 SEQID: 71 claimed sequence
CN Ac 1075
CN Alexan
CN Ara-C
CN ara-Cytosine
CN Arabinocytosine
CN Arabinoside C
CN Aracytidine
CN Aracytin
CN Arafcyt
CN Citozar
CN Cyclocide
CN Cytarabin
CN Cytarabine
CN Cytarabinoside
CN Cytosar
CN Cytosine .beta.-D-arabinofuranoside
CN Cytosine .beta.-D-arabinoside
CN **Cytosine arabinoside**
CN Cytosine-1-.beta.-arabinofuranoside

5/4/211.09
5/4/211.10

CN Cytosine-1-.beta.-D-arabinofuranoside
 CN DepoCyte
 CN NSC 63878
 CN Spongocytidine
 CN U 19920
 CN U 19920A
 CN Udicil
 FS STEREOSEARCH
 MF C9 H13 N3 O5
 CI COM
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
 BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT,
 CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU,
 DIOGENES, DRUGU, EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
 MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PHARMASEARCH,
 PROMT, RTECS*, TOXCENTER, TOXLIT, USAN, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4970 REFERENCES IN FILE CA (1967 TO DATE)
 139 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 4983 REFERENCES IN FILE CAPLUS (1967 TO DATE)
 30 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY	SESSION
	21.08	21.23

STN INTERNATIONAL LOGOFF AT 07:07:26 ON 08 FEB 2002

Trying 3106016892...Open

Welcome to STN International! Enter x:x

LOGINID:sssptaul25jdg

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Sep 17 IMSworld Pharmaceutical Company Directory name change
to PHARMASEARCH
NEWS 3 Oct 09 Korean abstracts now included in Derwent World Patents
Index
NEWS 4 Oct 09 Number of Derwent World Patents Index updates increased
NEWS 5 Oct 15 Calculated properties now in the REGISTRY/ZREGISTRY File
NEWS 6 Oct 22 Over 1 million reactions added to CASREACT
NEWS 7 Oct 22 DGENE GETSIM has been improved
NEWS 8 Oct 29 AAASD no longer available
NEWS 9 Nov 19 New Search Capabilities USPATFULL and USPAT2
NEWS 10 Nov 19 TOXCENTER(SM) - new toxicology file now available on STN
NEWS 11 Nov 29 COPPERLIT now available on STN
NEWS 12 Nov 29 DWPI revisions to NTIS and US Provisional Numbers
NEWS 13 Nov 30 Files VETU and VETB to have open access
NEWS 14 Dec 10 WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
NEWS 15 Dec 10 DGENE BLAST Homology Search
NEWS 16 Dec 17 WELDASEARCH now available on STN
NEWS 17 Dec 17 STANDARDS now available on STN
NEWS 18 Dec 17 New fields for DPCI
NEWS 19 Dec 19 CAS Roles modified
NEWS 20 Dec 19 1907-1946 data and page images added to CA and Cplus
NEWS 21 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 22 Jan 25 Searching with the P indicator for Preparations
NEWS 23 Jan 29 FSTA has been reloaded and moves to weekly updates
NEWS 24 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update
frequency

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

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research. Use for software development or design or implementation
of commercial gateways or other similar uses is prohibited and may
result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 07:03:51 ON 08 FEB 2002

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.15

0.15

FILE 'REGISTRY' ENTERED AT 07:04:02 ON 08 FEB 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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STRUCTURE FILE UPDATES: 6 FEB 2002 HIGHEST RN 390354-99-1
DICTIONARY FILE UPDATES: 6 FEB 2002 HIGHEST RN 390354-99-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STN Note 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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CAS Registry Numbers that were added to the H/Z/CA/CAPLUS files between
12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches
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or by qualifying an L-number with /P, may have yielded incomplete results.
As of 1/23/02, the situation has been resolved. Also, note that searches
conducted using the PREP role indicator were not affected.

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incorporating CAS Registry Numbers with the P indicator between 12/27/01
and 1/23/02, are encouraged to re-run these strategies. Contact the
CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698,
worldwide, or send an e-mail to help@cas.org for further assistance or to
receive a credit for any duplicate searches.

=> s azadeoxycytidine/cn
L1 0 AZADEOXYCYTIDINE/CN

=> s decitabine/cn
L2 1 DECITABINE/CN

=> d l2

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 2353-33-5 REGISTRY
CN 1,3,5-Triazin-2(1H)-one, 4-amino-1-(2-deoxy-.beta.-D-erythro-
pentofuranosyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN s-Triazin-2(1H)-one, 4-amino-1-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-
(7CI, 8CI)
OTHER NAMES:
CN 2'-Deoxy-5-azacytidine
CN 2-Desoxy-5-azacytidine
CN 5-Aza-2'-deoxycytidine
CN 5-Azadeoxycytidine
CN DAC
CN **Decitabine**
CN NSC 127716
FS STEREOSEARCH
DR 123795-43-7, 105597-46-4
MF C8 H12 N4 O4
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, BEILSTEIN*, BIOBUSINESS,
BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,
CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DRUGNL, DRUGU, DRUGUPDATES, EMBASE,
IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR,
PROMT, RTECS*, SYNTHLINE, TOXCENTER, TOXLIT, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO

Trying 3106016892...Open

Welcome to STN International! Enter x:x

LOGINID:sssptaul25jdg

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

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NEWS 23 Jan 29 FSTA has been reloaded and moves to weekly updates

NEWS EXPRESS August 15 CURRENT WINDOWS VERSION IS V6.0c,
CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP),
AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
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of commercial gateways or other similar uses is prohibited and may
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:24:04 ON 31 JAN 2002

=> file reg

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.15	0.15

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 10:24:16 ON 31 JAN 2002

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STRUCTURE FILE UPDATES: 30 JAN 2002 HIGHEST RN 388563-50-6
DICTIONARY FILE UPDATES: 30 JAN 2002 HIGHEST RN 388563-50-6

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

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conducted using the PREP role indicator were not affected.

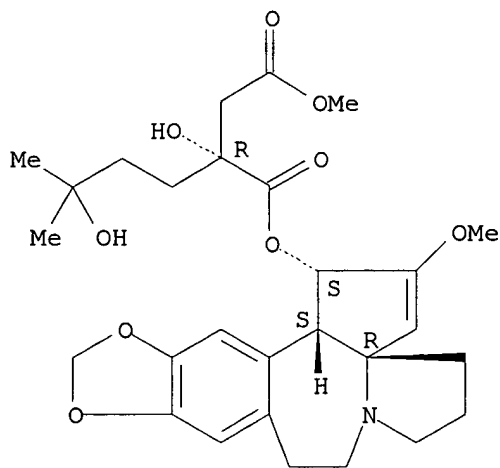
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worldwide, or send an e-mail to help@cas.org for further assistance or to
receive a credit for any duplicate searches.

=> s harringtonine/cn
L1 1 HARRINGTONINE/CN

=> d 11

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 26833-85-2 REGISTRY
CN Cephalotaxine, 4-methyl (2R)-2-hydroxy-2-(3-hydroxy-3-
methylbutyl)butanedioate (ester) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 4H-Cyclopenta[a][1,3]dioxolo[4,5-h]pyrrolo[2,1-b][3]benzazepine,
cephalotaxine deriv.
CN Cephalotaxine, 4-methyl 2-hydroxy-2-(3-hydroxy-3-methylbutyl)butanedioate
(ester), [3(R)]-
CN **Harringtonine (8CI)**
OTHER NAMES:
CN 2'R-Harringtonine
CN Harringtonin
FS STEREOSEARCH
DR 25302-09-4, 88455-80-5
MF C28 H37 N O9
CI COM
LC STN Files: ADISINSIGHT, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS,
BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CHEMCATS, CIN, CSCHEM, DDFU,
DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, NAPRALERT, PROMT, RTECS*,
SPECINFO, TOXCENTER, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

212 REFERENCES IN FILE CA (1967 TO DATE)
 3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 212 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
6.22	6.37

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 10:25:21 ON 31 JAN 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 31 Jan 2002 VOL 136 ISS 5

FILE LAST UPDATED: 30 Jan 2002 (20020130/ED)

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=> s ll and cancer

214 L1

153661 CANCER
21100 CANCERS
159896 CANCER
(CANCER OR CANCERS)

L2 15 L1 AND CANCER

=> d 12 1-15 all

L2 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2002 ACS
AN 2000:644675 CAPLUS
DN 134:36759
TI Induction of apoptosis by harringtonine in HeLa cells
AU Song, Changcheng; Xing, Luzhou; Song, Xiaoyuan; Peng, An; Wang, Yongchao
CS Key Lab. Cell Proliferation Regulation Biology, Beijing Normal Univ.,
Beijing, 100875, Peop. Rep. China
SO Beijing Shifan Daxue Xuebao, Ziran Kexueban (2000), 36(3), 394-399
CODEN: BSDKDH; ISSN: 0476-0301
PB Beijing Shifan Daxue Xuebao Ziran Kexueban Bianjibu
DT Journal
LA Chinese
CC 1-6 (Pharmacology)
AB The anticancer drug harringtonine (HT) which can induce apoptosis is
investigated in HeLa cells by Hoechst 33342 nucleic staining, agarose gel
electrophoresis of DNA and flow cytometry. Typical apoptotic cell death
is obsd. from 2 to 24 h and it increases in both dose- and time-dependent
fashion. The mechanism of HT-induced HeLa apoptosis is studied with
synchronized cells and measuring gene expression. The results demonstrate
that the expression of bcl-2 decreases in G1 and G2 and keeps relatively
stable in S phase, this agree with FCM results that HT induces HeLa cell
apoptosis and S phase cells increasing. In addn., HT induces down
regulation of c-myc to inhibit cell proliferation and delays the
progression of apoptosis. These results are important to understand the
mechanism of action of HT and to improve the effect of HT in
cancer chemotherapy.
ST apoptosis cell cycle harringtonine antitumor
IT Proteins, specific or class
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(bcl-2; induction of apoptosis by harringtonine in HeLa cells)
IT Gene, animal
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(c-myc; induction of apoptosis by harringtonine in HeLa cells)
IT Antitumor agents
Apoptosis
Cell cycle
(induction of apoptosis by harringtonine in HeLa cells)
IT **26833-85-2**, Harringtonine
RL: BAC (Biological activity or effector, except adverse); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(induction of apoptosis by harringtonine in HeLa cells)

L2 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2002 ACS
AN 1999:581358 CAPLUS
DN 132:148682
TI Establishment of multidrug-resistance leukemia cell line HL-60/H and its
biological features
AU Hong, Dengli; Zhang, Yaozhen; Zhang, Donghua; Shen, Guanxin; Shao,
Jingfang; Li, Dengju; Cao, Wenjing; Liu, Wenli
CS Department of Hematology, Tongji Hospital, Tongji Medical University,
Wuhan, 430030, Peop. Rep. China
SO Tongji Yike Daxue Xuebao (1999), 28(4), 302-305
CODEN: TYDXEP; ISSN: 0258-2090
PB Tongji Yike Daxue
DT Journal
LA Chinese
CC 9-11 (Biochemical Methods)
Section cross-reference(s): 1
AB A multidrug-resistance leukemia cell line HL-60/H resistant to

harringtonine (H) was cloned and screened by limit-dilg. method by gradually increasing dosage of H to study drug-resistance and drug-induced apoptosis. Biol. features of HL-60/H were measured by flow cytometry, transmission electron microscope, DNA fragmentation assay and immunohistochem. The results showed that HL-60/H cells had as 89.2-fold higher resistance to H compared to HL-60 cells. IC50 of H for HL-60/H did not markedly decrease after subculture 16 times in the medium without H. HL-60/H cells were cross-resistant to many other kinds of anti-**cancer** drugs. The expression of P-170 and BCL-2 obviously increased in HL-60/H cells. Intracellular daunorubicin accumulation in HL-60/H was much less than that in HL-60. It was not easy for H to induce apoptosis of HL-60/H cells. HL-60/H is a stable multidrug resistance cell sub-line. The important mechanism for HL-60/H cells resistant to drugs might be that drugs do not easily accumulate in cells because of the over-expression of P-170. HL-60/H cells are resistant to apoptosis induced by drugs because of the over-expression of BCL-2.

ST multi drug resistance leukemia cell line HL60 H apoptosis

IT Animal cell line

(HL-60/H; establishment of a multidrug-resistance leukemia cell line
HL-60/H and its biol. features)

IT P-glycoproteins

RL: BOC (Biological occurrence); BIOL (Biological study); OCCU
(Occurrence)

(P-170; establishment of a multidrug-resistance leukemia cell line
HL-60/H and its biol. features)

IT Proteins, specific or class

RL: BOC (Biological occurrence); BIOL (Biological study); OCCU
(Occurrence)

(bcl-2; establishment of a multidrug-resistance leukemia cell line
HL-60/H and its biol. features)

IT Apoptosis

Leukemia

Multidrug resistance

(establishment of a multidrug-resistance leukemia cell line HL-60/H and
its biol. features)

IT 20830-81-3, Daunorubicin

RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(intracellular accumulation; establishment of a multidrug-resistance
leukemia cell line HL-60/H and its biol. features)

IT 26833-85-2, Harringtonine

RL: BAC (Biological activity or effector, except adverse); BUU (Biological
use, unclassified); BIOL (Biological study); USES (Uses)
(resistance; establishment of a multidrug-resistance leukemia cell line
HL-60/H and its biol. features)

L2 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2002 ACS

AN 1998:316120 CAPLUS

DN 129:49320

TI Antisense expression of protein kinase C.alpha. improved sensitivity to
anticancer drugs in human lung **cancer** LETPa-2 cells

AU Wang, Xiang-Yang; Liu, Hui-Tu

CS Dep. Biology, Beijing Normal Univ., Beijing, 100875, Peop. Rep. China

SO Zhongguo Yaoli Xuebao (1998), 19(3), 265-268

CODEN: CYLPDN; ISSN: 0253-9756

PB Kexue Chubanshe

DT Journal

LA English

CC 1-6 (Pharmacology)

AB AIM: to study the role of protein kinase C.alpha. (PKC.alpha.) in
sensitivity to some clin. anticancer drugs in human lung **cancer**
LTPa-2 cells. METHODS: human lung **cancer** cell model expressing
antisense PKC.alpha. was established and characterized by gene
transfection and immunoblotting. Northern blotting was used to analyze
the expression of multiple drug resistance (mdr-1) gene and antisense
PKC.alpha. mRNA. IC50 for some anticancer drugs in cultured cells were
measured. RESULTS: expression of antisense PKC.alpha. mRNA inhibited
mdr-1 gene expression in lung **cancer** cells and improved

sensitivity to anticancer drugs (harringtonine, carboplatin, bleomycin A5, vincristine and doxorubicin) in lung **cancer** cells. IC50 for harringtonine, carboplatin, bleomycin A5, vincristine, and doxorubicin was decreased by 46.4 %, 42.1 %, 79 %, 69.9 %, and 61.6 % resp. CONCLUSION: PKC.alpha. plays an important regulation role of mdr-1 gene expression and drug sensitivity in human lung **cancer** cells.

ST lung **cancer** drug sensitivity protein kinase
IT Lung tumor inhibitors
(antisense expression of protein kinase C.alpha. improved sensitivity to anticancer drugs in human lung **cancer** LETPa-2 cells)

IT MDR1 gene (animal)
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(antisense expression of protein kinase C.alpha. improved sensitivity to anticancer drugs in human lung **cancer** LETPa-2 cells)

IT 57-22-7, Vincristine 11116-32-8, Bleomycin A5 23214-92-8, Doxorubicin 26833-85-2, Harringtonine 41575-94-4, Carboplatin
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antisense expression of protein kinase C.alpha. improved sensitivity to anticancer drugs in human lung **cancer** LETPa-2 cells)

IT 141436-78-4
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.; antisense expression of protein kinase C.alpha. improved sensitivity to anticancer drugs in human lung **cancer** LETPa-2 cells)

L2 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2002 ACS
AN 1996:305866 CAPLUS
DN 125:25740
TI A study on the mutagenicity of antineoplastic drugs and antimutagens against
AU Zhao, Z. Z.; Wen, D. G.; Wei, L. Z.; Zhu, H. M.; Zhao, W. Y.; Chen, C. Y.; Zhao, Y. L.; Gao, Y. Z.; Gu, S. K.
CS Hebei Cancer Institute, Shijiazhuang, Peop. Rep. China
SO Proc. Int. Cancer Congr., Free Pap. Posters, 16th (1994), Volume 1, 353-356. Editor(s): Rao, R. S. Publisher: Monduzzi Editore, Bologna, Italy.
CODEN: 62UYAO

DT Conference
LA English
CC 1-6 (Pharmacology)
AB With the aim to investigate the mutagenicity of antineoplastic drugs and to look for antimutagens against them, we examd. the mutagenicity of 22 commonly used antineoplastic agents by Ames test, SOS inductest, and SOS chromtest. We also examd. the possible action of 60 chinese herbs, fruits, vegetables and vitamins by SOS mutational and antimutational test. The result both with and without S9(rat liver microsomal enzymes) indicated that 17 (77.3%) of the 22 antineoplastic agents could induce mutagenesis in the testing strains; 36 types of natural plants, vitamins, and drinks could inhibit the mutagenicity of the antineoplastic agents. As the incidence of **cancer** continues to rise and the medicinal industry expands, there is a greet increase in the types and amt. of antineoplastic drugs produced. Many antineoplastic drugs are genetically toxic; recently attention has been paid to the mutagenicity of the drugs and to natural antimutagens against it.

ST antineoplastic drug mutagenicity antimutagen
IT Mutagens
Neoplasm inhibitors
(antineoplastic drug mutagenicity and antimutagens)

IT Pharmaceutical natural products
Vitamins
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antineoplastic drug mutagenicity and antimutagens)

IT 50-07-7, Mitomycin C 50-18-0, Cyclophosphamide 50-76-0, Actinomycin D 51-21-8, 5-Fluorouracil 51-75-2, Mustine 59-05-2, Methotrexate 125-84-8, Aminoglutethimide 147-94-4, Cytarabine 154-93-8, Carmustin

671-16-9, Procarbazine 865-21-4, Vinblastin 11056-06-7, Bleomycin
13010-47-4, Lomustine 13455-05-5, Thiophosphoramidate 15663-27-1,
Cisplatin 17902-23-7, Ftorafur 25316-40-9, Adriamycin
26833-85-2, Harringtonin 33419-42-0, Etoposide 41575-94-4,
Carboplatin 56390-09-1, Farmorubicin
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(antineoplastic drug mutagenicity and antimutagens)

L2 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2002 ACS
AN 1995:678592 CAPLUS
DN 123:74386
TI Preliminary study of the effect of selected Chinese natural drugs on human
ovarian **cancer** cells
AU Yu, Jing Jie; Reed, Eddie
CS National Cancer Institute, National Institutes Health, Bethesda, MD,
20892, USA
SO Oncol. Rep. (1995), 2(4), 571-5
CODEN: OCRPEW
DT Journal
LA English
CC 1-6 (Pharmacology)
AB This study investigated the in vitro anticancer effects of four Chinese
natural drugs on the human ovarian **cancer** cell lines A2780
(cisplatin-sensitive) and A2780/CP70 (cisplatin-resistant). Cells were
treated with series of concns. of drug preps. for 24 h. Vincristine
prepd. by the same pharmaceutical firm in China, was used as an internal
control. As assessed by colony formation assays, harringtonine induced
similar growth inhibiting effects in A2780 and A2780/CP70 cell lines with
a 50% ID (IC50) of 0.195 .mu.g/mL in both. Rhabdosis rubescens Hara
demonstrated a cytotoxic effect on cisplatin-sensitive A2780 cells with an
IC50 of 0.58 mg/mL; but there was no effect on A2780/CP70 cells. The data
suggest direct antiproliferative activity for at least two Chinese natural
medicines used in the clin. treatment of **cancer** in China.
Further investigation of Chinese natural medicines may be valuable in the
identification of new and effective anticancer drugs with minimal side
effects.
ST Chinese natural drug ovary **cancer** resistance; cisplatin ovary
cancer resistance Rhabdosis antitumor; harringtonine juglone
solanine norcantharidin ovary **cancer**
IT Drug resistance
Rhabdosis rubescens
(Chinese natural drugs effects on human cisplatin-resistant ovarian
cancer cells)
IT Pharmaceutical natural products
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Chinese; Chinese natural drugs effects on human cisplatin-resistant
ovarian **cancer** cells)
IT Ovary, neoplasm
(inhibitors, Chinese natural drugs effects on human cisplatin-resistant
ovarian **cancer** cells)
IT Neoplasm inhibitors
(ovary, Chinese natural drugs effects on human cisplatin-resistant
ovarian **cancer** cells)
IT 15663-27-1, Cisplatin
RL: BAC (Biological activity or effector, except adverse); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(Chinese natural drugs effects on human cisplatin-resistant ovarian
cancer cells)
IT 481-39-0, Juglone **26833-85-2**, Harringtonine 29745-04-8,
Norcantharidin 51938-42-2, Solanine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Chinese natural drugs effects on human cisplatin-resistant ovarian
cancer cells)

L2 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2002 ACS
AN 1995:290684 CAPLUS
DN 122:45924

TI Effect of harringtonine on apoptotic cell death and cell cycle progression
 in human leukemia HL60 cells
 AU Liu, Yun-Peng; Ueda, Takanori; Yoshida, Akira; Iwasaki, Hiromichi;
 Nakamura, Toru
 CS 1st Department Internal Medicine, Fukui Medical School, Fukui, 910-11,
 Japan
 SO Anticancer Res. (1994), 14(4A), 1509-15
 CODEN: ANTRD4; ISSN: 0250-7005
 DT Journal
 LA English
 CC 1-6 (Pharmacology)
 AB The mechanism of cell killing induced by harringtonine (HT) was
 investigated in HL60 cells by metabolic labeling studies, light and
 transmission electron microscopy, agarose gel electrophoresis of DNA, and
 flow cytometry. At concns. higher than 0.02 μ M HT showed significant
 inhibition on cell growth and protein and DNA synthesis. Following
 exposure to HT, typical apoptotic cell death was obsd. from 1.5 to 4 h and
 it increased in both dose- and time-dependent fashion. In addn., at 0.04
 μ M of HT the nonapoptotic cells delayed the progression of cell cycle
 through S and G2 phase and finally arrested in G1 phase. These results
 are important to understand the mechanism of action of HT and to improve
 the effect of HT in **cancer** chemotherapy.
 ST antitumor harringtonine apoptosis cell cycle
 IT Apoptosis
 Cell cycle
 (harringtonine induction of apoptosis and effect on cell cycle
 progression in human leukemia cells in relation to antitumor effect)
 IT Neoplasm inhibitors
 (leukemia, harringtonine induction of apoptosis and effect on cell
 cycle progression in human leukemia cells in relation to antitumor
 effect)
 IT **26833-85-2**, Harringtonine
 RL: BAC (Biological activity or effector, except adverse); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (harringtonine induction of apoptosis and effect on cell cycle
 progression in human leukemia cells in relation to antitumor effect)

L2 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2002 ACS
 AN 1993:462320 CAPLUS
 DN 119:62320
 TI Chemosensitivity testing of adenosystic, tongue and gigiva **cancer**
 cell lines
 AU Wu, Junzheng; Situ, Zhenqiang; Chen, Jianyuan; Liu, Bin; Wang, Wei
 CS Coll. Stomatol., 4th Mil. Med. Univ., Xian, 710032, Peop. Rep. China
 SO Zhonghua Kouqiang Yixue Zazhi (1992), 27(2), 107-8
 CODEN: ZKYZE2
 DT Journal
 LA Chinese
 CC 1-1 (Pharmacology)
 AB The in vitro MTT assay was used for examg. the chemosensitivity of human
 adenocarcinoma SACC-83, tongue **cancer** Tca 8113 and gingiva
cancer Ca 9-22 cells to 14 antitumor agents. Adriamycin,
 methotrexate and 5-fluorouracil showed the highest activity against these
 cell lines. Cantharidin did not show any activity in this study.
 ST antitumor chemosensitivity MTT assay cell line
 IT Neoplasm inhibitors
 (adenocarcinoma, chemosensitivity to, MTT assay for, in human cells)
 IT Gingiva
 (neoplasm, chemosensitivity of, to antitumor agents, MTT assay for, in
 human cells)
 IT Tongue
 (neoplasm, carcinoma, inhibitors, chemosensitivity of, MTT assay for,
 in human cells)
 IT Neoplasm inhibitors
 (tongue carcinoma, chemosensitivity of, MTT assay for, in human cells)
 IT 298-93-1, MTT
 RL: ANST (Analytical study)

(chemosensitivity assay using, in human adenocarcinoma and tongue **cancer** and gingiva **cancer** cells)

IT 50-07-7, Mitomycin C 50-76-0, Actinomycin D 51-21-8, 5-Fluorouracil
 52-24-4, Thiotepe 55-86-7, Nitrogen mustard 56-25-7, Cantharidin
 57-22-7, Vincristine 59-05-2, Methotrexate 66-97-7, Psoralen
 147-94-4, Ara-C 15663-27-1, Cisplatin 23214-92-8, Adriamycin
26833-85-2, Harringtonine 115038-62-5, Pingyangmycin
 RL: ANST (Analytical study)
 (tumor sensitivity to, MTT assay for, in human adenocarcinoma and
 tongue **cancer** and gingiva **cancer** cells)

L2 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2002 ACS
 AN 1993:462310 CAPLUS
 DN 119:62310
 TI MTT assay and its application in chemosensitivity testing of antitumor
 Chinese medicine
 AU Wu, Junzheng; Situ, Zhenqiang; Liu, Bin; Wang, Wei; Chen, Jianyuan
 CS Coll. Stomatol., 4th Mil. Med. Univ., Chengdu, 710032, Peop. Rep. China
 SO Zhonghua Kouqiang Yixue Zazhi (1992), 27(6), 373-5
 CODEN: ZKYZE2
 DT Journal
 LA Chinese
 CC 1-1 (Pharmacology)
 AB A MTT (3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide)
 colorimetric assay was used to examine the responses of human
 mucoepithelial **cancer** (MEC-1), adenosarcoma (SACC-83), tongue
cancer (Tca 8113) and gingival **cancer** (Ca 9-22) cell
 lines to several antitumor Chinese medicines (psoralen, harringtonine,
 vincristine and cantharidin); the relative chemosensitivity of cells to
 pingyangmycin, mitomycin C or cisplatin was also tested. Results suggest
 that psoralen, harringtonine and vincristine have therapeutic potential
 for the treatment of **cancer** of the oral cavity and salivary
 gland.
 ST antitumor chemosensitivity MTT oral cavity **cancer**
 IT Neoplasm inhibitors
 (salivary gland, testing of, in human cells, MTT chemosensitivity test
 for)
 IT Neoplasm inhibitors
 (mouth, testing of, in human cells, MTT chemosensitivity test for)
 IT Salivary gland
 (neoplasm, inhibitors, MTT chemosensitivity test for, in human cells)
 IT Mouth
 (neoplasm, inhibitors, testing of, in human cells, MTT chemosensitivity
 test for)
 IT 50-07-7 56-25-7 57-22-7 66-97-7, Psoralen 15663-27-1
26833-85-2 115038-62-5, Pingyangmycin
 RL: BAC (Biological activity or effector, except adverse); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antitumor activity of, in human oral cavity and salivary gland
cancer cells, MTT chemosensitivity test for)
 IT 298-93-1, MTT
 RL: ANST (Analytical study)
 (**cancer** chemosensitivity test using, in human oral cavity and
 salivary gland **cancer** cells)

L2 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2002 ACS
 AN 1989:50894 CAPLUS
 DN 110:50894
 TI Antagonistic interactions of hexamethylene bisacetamide in combination
 with 1-.beta.-D-arabinofuranosylcytosine, adriamycin and harringtonine on
 the growth and differentiation of HL-60 cells in vitro
 AU Kong, Xiangbin; Fanucchi, Michael P.; Chou, Ting-Chao
 CS Lab. Pharmacol., Mem. Sloan-Kettering Cancer Cent., New York, NY, 10021,
 USA
 SO Leuk. Res. (1988), 12(10), 853-9
 CODEN: LEREDD; ISSN: 0145-2126
 DT Journal

LA English
 CC 1-6 (Pharmacology)
 AB Selective killing of **cancer** cells by cytotoxic agents and the conversion of cancerous cells to normal state by differentiation agents represent two basically different approaches in chemotherapy. The combinations of the cell differentiation-inducer hexamethylene bisacetamide (HMBA) and the cytotoxic agents 1-.beta.-D-arabinofuranosylcytosine (Ara-C), adriamycin (Adr), and harringtonine (HT) were examd. for cytotoxicity and induction of cell differentiation in HL-60 cells by measuring cell growth inhibition, morphol. maturation, and nitroblue tetrazolium (NBT) redn. After 5-day exposure to each drug alone the ED50s for cell growth inhibition were 0.01 .mu.M for Ara-C, 0.012 .mu.M for Adr, 0.017 .mu.M for HT, and 2.53 mM for HMBA. ED50s for differentiation were 0.089 .mu.M (morphol.) and 0.06 .mu.M (NBT) for Ara-C, 0.12 .mu.M (morphol.) and 0.09 .mu.M (NBT) for Adr, 0.04 .mu.M (morphol.) and 0.06 .mu.M (NBT) for HT, and 2.55 mM (morphol.) and 2.43 mM (NBT) for HMBA. at dose levels from ED50 to ED95, the combinations of Adr/HMBA and HT/HMBA had antagonistic cytotoxic and cell differentiation effects. The combination of Ara-C/HMBA had antagonistic cytotoxic effects but only slight synergistic cell differentiation effects. Thus, equipotency combinations of the above three pairs of drugs do not synergistically enhance cytotoxicity or cell differentiation effects in vitro to levels high enough for successful treatment of acute leukemia.

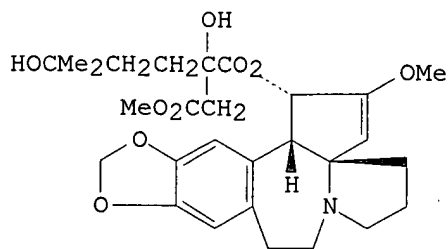
ST hexamethylene bisacetamide interaction antitumor leukemia differentiation;
 IT Drug interactions
 (of hexamethylene bisacetamide with antitumor agents, leukemic cell cytotoxicity or differentiation response to)

IT Toxicity
 (cyto-, of antitumor drugs, hexamethylene bisacetamide interaction effects on leukemic cell)

IT Neoplasm inhibitors
 (leukemia, adriamycin and arabinofuranosylcytosine and harringtonine, hexamethylene bisacetamide interaction with, leukemic cell cytotoxicity or differentiation response to)

IT 147-94-4, 1-.beta.-D-Arabinofuranosylcytosine 23214-92-8, Adriamycin
26833-85-2, Harringtonine
 RL: BIOL (Biological study)
 (hexamethylene bisacetamide interaction with, leukemic cell cytotoxicity or differentiation response to)

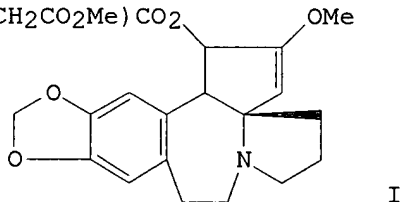
L2 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2002 ACS
 AN 1983:463951 CAPLUS
 DN 99:63951
 TI Comparative in vitro antitumor activity of homoharringtonine and harringtonine against clonogenic human tumor cells
 AU Jiang, T. L.; Liu, R. H.; Salmon, S. E.
 CS Cancer Cent., Univ. Arizona, Tucson, AZ, 85724, USA
 SO Invest. New Drugs (1983), 1(1), 21-5
 CODEN: INNDDK
 DT Journal
 LA English
 CC 1-6 (Pharmacology)
 GI



DN 98:65182
 TI Biochemical actions of some anticancer agents
 AU Wu, Guoli; Nie, Jianchu; Yang, Huijun; Chen, Xing; Wei, Qun; Xiang, Huaming; Zhang, Yinghua
 CS Dep. Biol., Beijing Normal Univ., Beijing, Peop. Rep. China
 SO Beijing Shifan Daxue Xuebao, Ziran Kexueban (1982), (2), 57-66
 CODEN: BSDKDH
 DT Journal
 LA Chinese
 CC 1-6 (Pharmacology)
 AB The effects of harringtonine [26833-85-2], cantharidate [54382-54-6], Zhu-ling (Polyporus umbellatus ext.), and Sarcandra glabra ext. on hepatoma H22, L-1210 leukemia, and tumor-bearing mice were studied. In hepatoma H22 cells, cantharidate and Zhu-ling ext. not only increased the intracellular levels of cAMP [60-92-4] and the cAMP/cGMP [7665-99-8] ratio, but also inhibited cAMP phosphodiesterase [9036-21-9] activity; in addn., cantharidate increased the cytoplasmic cAMP-dependent protein kinase [9026-43-1] activity. Harringtonine had similar effects on cyclic nucleotide metab. in L-1210 leukemia cells. Cantharidate, S. glabra ext., and Zhu-ling ext. affected the activities of 4 lysosomal enzymes, acid phosphatase [9001-77-8], DNase [9003-98-9], RNase [9001-99-4], and cathepsin D [9025-26-7]. Zhu-ling ext. restored the liver levels of glycogen [9005-79-2], glucose-6-phosphate [56-73-5], and fructose-1,6-diphosphate [488-69-7] in hepatoma H22-bearing mice. Cantharidate, Sarcandra glabra ext., and Zhu-ling ext. decreased O consumption in hepatoma H22 cells. In vitro, the respiration control index of hepatoma H22 cells was increased by these drugs. They also increased the liver succinic dehydrogenase [9002-02-2] and catalase [9001-05-2] in **cancer**-bearing mice.
 ST anticancer drug enzyme; harringtonine enzyme metab neoplasia; cantharidate enzyme metab neoplasia; Zhu ling enzyme metab neoplasia
 IT Neoplasm inhibitors
 (animal metab. response to, in neoplasia)
 IT Neoplasm, metabolism
 (cantharidate and harringtonine and oriental plant exts. effect on)
 IT Lysosome
 (enzymes of liver, neoplasm inhibitors effect on, in neoplasia)
 IT Polyporus umbellatus
 Sarcandra glabra
 (ext., animal metab. response to, in neoplasia)
 IT Animal metabolism
 Animal respiration
 (in neoplasia, neoplasm inhibitors effect on)
 IT Liver, metabolism
 (neoplasm inhibitors effect on)
 IT Nucleotides, biological studies
 RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (cyclic, metab. of, neoplasm inhibitors effect on, in neoplasia)
 IT 9026-43-1
 RL: BIOL (Biological study)
 (cAMP-dependent, of neoplasm, drugs effect on)
 IT 60-92-4 7665-99-8
 RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (metab. of, in neoplasm, drugs effect on)
 IT 26833-85-2 54382-54-6
 RL: BIOL (Biological study)
 (neoplasm metab. response to)
 IT 9001-77-8 9001-99-4 9003-98-9 9025-26-7
 RL: BIOL (Biological study)
 (of liver lysosomes, neoplasm inhibitors effect on, in neoplasia)
 IT 56-73-5 488-69-7 9001-05-2 9002-02-2 9005-79-2, biological studies
 RL: BIOL (Biological study)
 (of liver, neoplasm inhibitors effect on, in neoplasia)
 IT 9036-21-9
 RL: BIOL (Biological study)
 (of neoplasm, drugs effect on)

L2 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2002 ACS
 AN 1981:96250 CAPLUS
 DN 94:96250
 TI Mechanisms of action of harringtonine, a new anticancer agent
 AU Zhenkun, Pan; Yongchao, Wang; Kun, Lee; Chingyi, Sze; Xiujuan, Ji; Yuting, Xu; Yijun, Fan; Zhanrong, Li; Rui, Han
 CS Inst. Materia Med., Chin. Acad. Med. Sci., Beijing, Peop. Rep. China
 SO Proc. - U.S.-China Pharmacol. Symp. (1980), Meeting Date 1979, 69-92.
 Editor(s): Burns, John J.; Tsuchitani, Patricia Jones. Publisher: NAS, Washington, D. C.
 CODEN: 44XHAE
 DT Conference
 LA English
 CC 1-6 (Pharmacodynamics)
 GI

HOCMe₂CH₂CH₂C(OH)(CH₂CO₂Me)CO₂



AB Harringtonine (I) [26833-85-2] (0.86-2 mg/kg, i.p., for 5-12 consecutive days) was effective against L-615 and L-1210 leukemias, sarcoma 180, Walker carcinosarcoma 256, and Lewis lung **cancer**. I was most active against leukemia and was found to be effective against myelocytic, acute monocytic, erythro- and other leukemias in humans. The mechanism of the antileukemic action of I is discussed.
 ST antitumor harringtonine; leukemia inhibition harringtonine
 IT Neoplasm inhibitors
 (harringtonine, mechanism of action of)
 IT **26833-85-2**
 RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antitumor activity of, mechanism of)

L2 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2002 ACS
 AN 1974:445352 CAPLUS
 DN 81:45352
 TI Potentially useful combinations of chemotherapy detected in mouse tumor systems
 AU Kline, Ira
 CS Microbiol. Assoc., Inc., Bethesda, Md., USA
 SO Cancer Chemother. Rep., Part 2 (1974), 4(1), 33-43
 CODEN: CCSUBJ
 DT Journal
 LA English
 CC 1-5 (Pharmacodynamics)
 AB Combinations of ICRF-159 (I) [21416-87-5] with adriamycin [23214-92-8], daunorubicin [20830-81-3], camptothecin [7689-03-4], NSC 113089 [42013-69-4], cis-diamminedichloroplatinum [15663-27-1], and cytosine arabinoside [147-94-4] caused greater increases in the life-span of L1210 leukemia-bearing mice than did single-drug therapy. Other effective antileukemia drug combinations included NSC 45388 [4342-03-4] plus adriamycin, NSC 51143 [251-80-9], and camptothecin; camptothecin plus cyclophosphamide [50-18-0], isophosphamide [3778-73-2], and methotrexate [59-05-2]; 5-azacytidine [320-67-2] plus emetine [483-18-1]; and cytosine arabinoside plus NSC 82196 [5034-77-5].
 ST neoplasm inhibitor combination therapy; leukemia therapy drug combination; **cancer** therapy drug combination
 IT Leukemia
 (inhibitors of, drug combinations as)

IT Neoplasm inhibitors
 (leukemia treatment with, drug combinations in relation to)

IT 50-18-0 59-05-2 69-74-9 251-80-9 316-42-7 320-67-2 519-23-3
 3778-73-2 4342-03-4 5034-77-5 6872-73-7 7059-24-7 10212-28-9
 15663-27-1 19494-89-4 21416-87-5 23214-92-8 23541-50-6
 25387-67-1 25662-95-7 **26833-85-2** 42013-69-4
 RL: BIOL (Biological study)
 (leukemia treatment with, drug combinations in relation to)

L2 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2002 ACS
 AN 1972:535161 CAPLUS
 DN 77:135161
 TI Antitumor alkaloids from Cephalotaxus harringtonia. Structure and
 activity
 AU Powell, R. G.; Weisleder, D.; Smith, C. R., Jr.
 CS North. Reg. Res. Lab., Agric. Res. Serv., Peoria, Ill., USA
 SO J. Pharm. Sci. (1972), 61(8), 1227-30
 CODEN: JPMSAE
 DT Journal
 LA English
 CC 1-5 (Pharmacodynamics)
 AB Cephalotaxine (I) [24316-19-6] and a no. of its esters were isolated from
 the plant C. harringtonia and tested for antitumor activity. I was
 inactive, but harringtonine (II) [**26833-85-2**], isoharringtonine
 (III) [26833-86-3], homoharringtonine (IV) [26833-87-4], and
 deoxyharringtonine (V) [36804-95-2] had antitumor activity against exptl.
 P388 and L1210 leukemia in mice.
 ST cephalotaxine antitumor action; harringtonine leukemia; **cancer**
 cephalotaxine
 IT Cephalotaxus harringtonia
 (alkaloids of, neoplasm inhibition by)
 IT Neoplasm inhibitors
 (cephalotaxine esters)
 IT Nuclear magnetic resonance
 (of cephalotaxine esters)
 IT 24274-60-0
 RL: BAC (Biological activity or effector, except adverse); BIOL
 (Biological study)
 (neoplasm inhibiting activity of)
 IT 24316-19-6
 RL: BAC (Biological activity or effector, except adverse); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (neoplasm inhibiting activity of, ester derivs. in relation to)
 IT **26833-85-2** 26833-86-3 26833-87-4 36804-95-2
 RL: BAC (Biological activity or effector, except adverse); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (neoplasm inhibition by)
 IT 38535-03-4P 38535-04-5P 38535-05-6P 38535-06-7P 38535-07-8P
 38535-08-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

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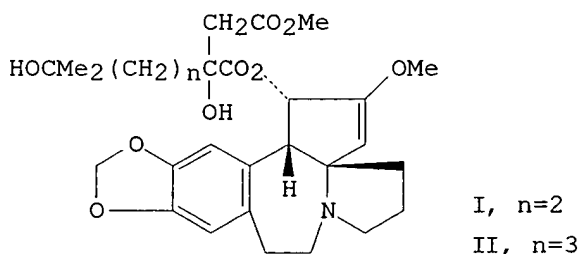
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ENTRY

TOTAL
SESSION

FULL ESTIMATED COST	40.89	47.26
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY	SESSION
	-9.29	-9.29

STN INTERNATIONAL LOGOFF AT 10:26:47 ON 31 JAN 2002

AN 1983:27435 CAPLUS
 DN 98:27435
 TI Antitumor activities of harringtonine and homoharringtonine, Cephalotaxus alkaloids which are active principles from plant by intraperitoneal and oral administration
 AU Takeda, Setsuo; Yajima, Nobuhiro; Kitazato, Kenji; Unemi, Norio
 CS Res. Inst., Taiho Pharm. Co., Ltd., Kawauchi, 771-01, Japan
 SO J. Pharmacobio-Dyn. (1982), 5(10), 841-7
 CODEN: JOPHDQ; ISSN: 0386-846X
 DT Journal
 LA English
 CC 1-6 (Pharmacology)
 GI



AB The antitumor activities of the Cephalotaxus alkaloids harringtonine (HA) (I) [26833-85-2] and homoharringtonine (HO) (II) [26833-87-4], were compared with those of the Vinca alkaloids vincristine (VCR) and vinblastine (VLB). HA and HO had significant activities against P388 leukemia, L1210 leukemia, and B16 melanoma by i.p. injection comparable to VCR and VLB. The therapeutic indexes (LD10/ED50) of HA and HO in B16 melanoma system were 1.90 and 2.31, while those of VCR and VLB were 1.38 and <1.00, resp. The oral administration of the Cephalotaxus alkaloids evoked a significant antitumor activity; Vinca alkaloids, however, induced no activity against P388 and B16 melanoma. The efficacy of HO on various tumor systems was equal or greater than that of HA. In contrast to VCR and VLB, HA and HO demonstrated moderate activity against P388/VCR, a subline of P388 resistant to vincristine. The i.p. injection of VCR or VLB produced an increase in the mitotic index of P388 cells as compared with the control values, but HA or HO decreased it. Apparently, HA and HO are a new class of active compds. of plant origin which may differ from the vinca alkaloids in the mechanism of antitumor activity.

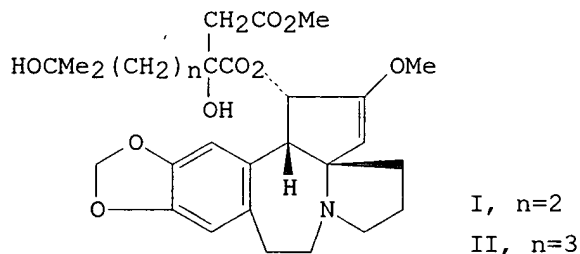
ST Cephalotaxus alkaloid antitumor; antitumor harringtonine homoharringtonine
 IT Cephalotaxus
 (alkaloids from, neoplasm-inhibiting activity of)

IT Alkaloids, biological studies
 RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (from Cephalotaxus, neoplasm-inhibiting activity of)

IT Neoplasm inhibitors
 (harringtonine and homoharringtonine as)

IT 26833-85-2 26833-87-4
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IT Neoplasm inhibitors

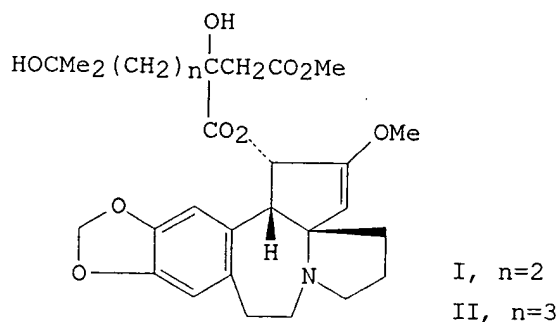
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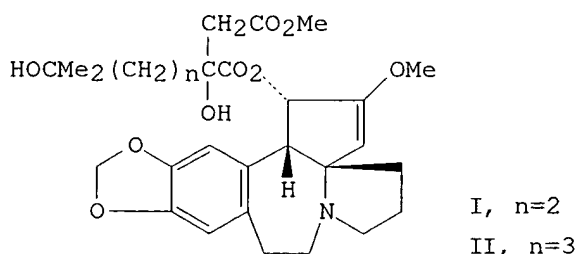
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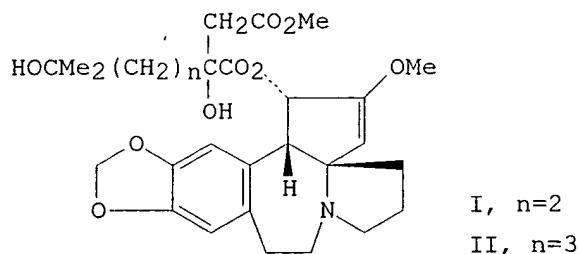


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ST **leukemia** inhibition harringtonone homoharringtonone

IT Neoplasm inhibitors
 (harringtonone and homoharringtonone as, cell morphol. in relation to)

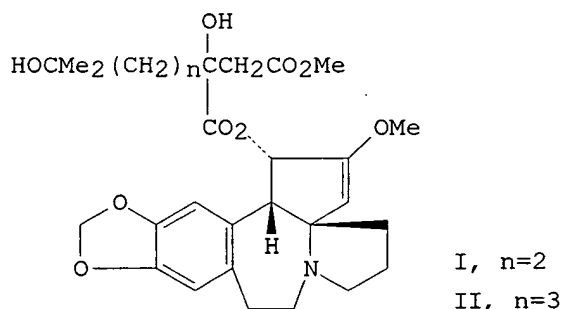
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AN 2000:47497 CAPLUS
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TI A phase II trial of homoharringtonine and caracemide in the treatment of patients with advanced large bowel **cancer**
AU Witte, Robert S.; Lipsitz, Stuart; Goodman, Thomas L.; Asbury, Robert F.; Wilding, George; Strnad, Charles M.; Smith, Thomas J.; Haller, Daniel G.
CS Gundersen Lutheran, La Crosse, WI, USA
SO Invest. New Drugs (1999), 17(2), 173-177
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PB Kluwer Academic Publishers
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CC 1-6 (Pharmacology)
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ST homoharringtonine caracemide colorectal carcinoma antitumor
IT Intestine, neoplasm
(colorectal carcinoma, inhibitors; toxicity and efficacy of homoharringtonine and caracemide in treatment of humans with advanced large bowel **cancer**)
IT Antitumor agents
(colorectal carcinoma; toxicity and efficacy of homoharringtonine and caracemide in treatment of humans with advanced large bowel **cancer**)
IT 26833-87-4, Homoharringtonine 81424-67-1, Caracemide
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
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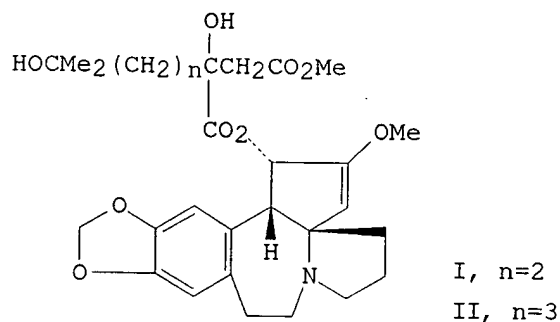


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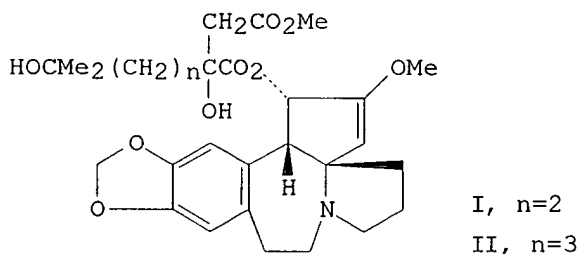
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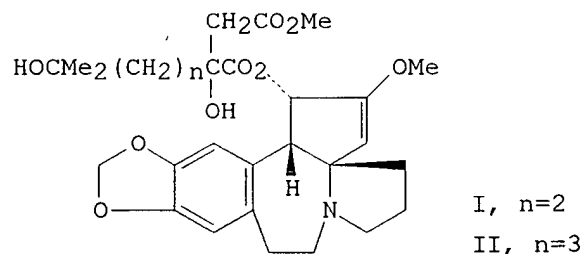


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